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We Claim:

1. A process for removing sulphide compounds from an exhaust gas flow from a first gasifier furnace in which a carbon containing fuel is consumed under reducing conditions, which process comprises:

- (a) providing in the furnace fuel an amount of limestone or calcium oxide sufficient to trap the sulphide compounds in the gas flow as calcium sulphide;
- (b) recovering the calcium sulphide as part of a first ash product from the furnace;
- (c) reacting the first ash product in a second furnace with sufficient carbon dioxide at a partial pressure and at a temperature sufficient to convert the calcium sulphide in the ash product to calcium carbonate and/or calcium oxide and to provide a gas flow containing sulphur dioxide;
- (d) recovering the sulphur dioxide; and
- (e) recovering a substantially calcium sulphide free second ash product.

2. A process according to Claim 1 wherein the furnace fuel is a fossil fuel.

3. A process according to Claim 2 wherein the furnace fuel is coal.

4. A process according to Claim 1 wherein the first furnace is operated according to the integrated gasification combined cycle technique(IGCC).

5. A process according to Claim 1 wherein the second furnace is chosen from the group consisting of a pressurised fluidised bed combustor(PFBC) and a circulating fluidised bed combustor(CFBC).
6. A process according to Claim 1 wherein the second furnace is operated at a temperature of from about 850°C to about 980°C.
7. A process according to Claim 1 wherein in step (c) at least 90% of the calcium sulphide present in the first ash product is converted to calcium carbonate or calcium oxide.
8. A process according to Claim 1 wherein in step (c) of Claim 1 a mixture of carbon dioxide and nitrogen is used to obtain the desired carbon dioxide partial pressure.